

AMENDMENTS TO THE CLAIMS

Please enter the following amendments without prejudice or disclaimer.

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the claims

1. (Currently amended): A process for the direct isolation of crystalline carotenoid compound from microbial biomass without a carotenoid solubilization step, the process comprising disrupting the microbial cell walls, separating cellular debris from the resulting carotenoid crystal containing residue, washing the carotenoid crystal containing residue with a solvent to remove lipid, suspending the obtained carotenoid crystals in water to float the crystals and remove biomass debris, and recovering the crystals ~~and, optionally, further purifying the crystals.~~

2. (canceled)

3. (previously presented): The process of claim 1, wherein the carotenoid crystal containing residue is washed with water prior to lipid removal.

4. (previously presented): The process of claim 1, wherein the solvent to remove lipid is a lower alcohol or acetone.

5. (previously presented): The process of claim 1, wherein a solvent immiscible with water is added to the microbial cells before, during or after disrupting the cell walls.

6. (previously presented): The process of claim 5, wherein said solvent immiscible with water is added to the disrupted cell mass after disrupting the cell walls.

7. (previously presented): The process of claim 5, wherein said solvent immiscible with water is an oil.

8. (previously presented): The process of claim 1, wherein floating of the crystals is effected with bubbling of a gas through the suspension.

9. (previously presented): The process of claim 1, wherein the water to float the crystals further contains a salt and/or an oil.

10. (original): The process of claim 9, wherein the water to float the crystals contains a vegetable oil.

11. (previously presented): The process of claim 1, wherein the microbial biomass is from *Blakeslea trispora*.

12. (previously presented): The process of claim 1, wherein the carotenoid compound is β -carotene.

13. (previously presented): The process of claim 4 wherein the solvent is ethanol.

14. (previously presented): The process of claim 7 wherein the oil is a vegetable oil.

15. (new): The process of claim 1, wherein the recovered crystals are further purified.